

LLDPE**LLDPE C4LL 50026****LINEAR LOW DENSITY POLYETHYLENE (LLDPE)**

This is an ethylene 1-butene copolymer resin series. This high-flow LLDPE grade offers a unique combination of excellent processability and outstanding product properties. Parts manufactured from this resin have good gloss and offer advantages in toughness, environmental stress-crack resistance, stiffness, and heat distortion resistance over comparable low-density polyethylene items.

Typical Application	Product Characteristics	International Compliance
• Compounding (powder form) • Housewares • Lids • Thin-wall articles	• Excellent processability • Good gloss • Good environmental stress-crack resistance • Good stiffness and heat distortion resistance versus comparable LDPE	• Food-contact compliance (e.g. FDA, EU) documented at the producer level; contact for application-specific compliance letter

Physical Properties

Properties	Test Method	Typical Value	Unit
Density	ASTM D1505	0.926	g/cm ³
Melt Index (190°C/2.16kg)	Internal Method	50	g/10 min
Peak Melting Temperature	Internal Method	122	°C
Vicat Softening Temperature	ISO 306	91	°C
Tensile Stress at Yield	ISO 527-2/1A/50	10	MPa
Tensile Strain at Yield	ISO 527-2/1A/50	20	%
Tensile Strain at Break	ISO 527-2/1A/50	>100	%
Flexural Modulus	ISO 178	290	MPa
Environmental Stress-Crack Resistance (10% Igepal)	ASTM D1693	6	h
Notched Izod Impact Strength	ISO 180/1A	42	kJ/m ²

Processing Guidelines

Molded properties were measured on 2 mm thick compression-molded plaques prepared per ASTM D4703 Procedure C (177°C, 15°C/min); ESCR specimens were 2 mm plaques with notch condition B.

1. Vicat Softening Temperature (91°C) and Flexural Modulus (290 MPa) values converted from the producer's published English (°F/psi) units.
2. The nominal properties reported herein are typical of the product and do not reflect normal testing variance; they should not be used for specification purposes.